Amendments to the Specification:

Please replace the paragraph on page 5, lines 10-12, with the following substitute paragraphs:

Fig. 5 is a graphical representation of average power plotted as a function of frequency.

Fig. 6 is a flow chart of the process of generating the partial response OFDM signal using the system of Fig. 1.

Please replace the paragraph on page 8, lines 6-24, with the following substitute paragraph:

Referring now to Figs. 2, 3, 4, and 5, the effect of the partial response generating polynomial on the time-domain symbol vector is illustrated on a 64-sample time-symbol. Referring specifically to Fig. 2, a 64-sample time-symbol is shown in absolute value of magnitude only, which is drawn from a set of randomly picked Quadrature Phase Shift Keyed (QPSK) sub-symbols in the frequency domain. Although Fig. 2 illustrates QPSK sub-symbols, any constellation can be used for the partial response signal. In Figs. 3 and 4, the corresponding time-symbol magnitudes using a PR polynomial c of order M=2 and M=4, respectively, are illustrated with several of the samples of the time-symbol suppressed near the ends. Dropping the samples near the ends results in virtually no performance loss because the energy at the tails of this time-symbol is very low. The label "dropping" is used herein to mean that the sub-symbols are not transmitted as part of the transmitted partial response signal. Accordingly, dropping or not transmitting the low-energy samples essentially enables compression of the signal in time, thereby achieving significant time or bandwidth gains. Reducing the time taken to transmit an OFDM time-symbol because of the PR effects can be construed as leading to extra bandwidth.

Please replace the paragraph on page 12, lines 9-16, with the following substitute paragraph:

Referring now to Fig. 6, the process of generating a PR-OFDM signal begins at step 100. At step 110, a cyclic convoler is selected that reduces the extremity sub-symbols to near zero amplitude. At step 120, the cyclic convoler is applied to the signal to generate a convoled signal. At step 130, the signal is transformed from the frequency domain to the time domain. At step 140, the near zero amplitude sub-symbols of the convolved signal are dropped to produce a PR-OFDM signal. At step 150, a cyclic prefix is appended to the PR-OFDM signal and the process ends at step 160.